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From 35: cardiovascular diseases, high blood pressure, Cholesterol and blood fat levels

There are cardiovascular disease risks that cannot be controlled. This includes age, gender and hereditary disposition.

Most risk factors can, however, be eliminated or improved through health-conscious behavior.

What we can influence is: smoking, exercise, diet, obesity.

What we cannot influence is: age, gender and hereditary predisposition.

If heart and circulatory diseases occur in the family, it is all the more important to pay attention to a healthy lifestyle and to avoid influencing risk factors from the age of **35**.

This is called primary prevention, i.e. the real prevention of diseases:

Homocysteine

Although homocysteine has been considered an independent risk factor for the development of atherosclerosis for some time, similar to cholesterol, blood lipids and high blood pressure, this risk factor is still largely unknown in the population.

Increased homocysteine levels favor the develop-



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ment of high blood pressure, heart and circulatory diseases, stroke, thrombosis, dementia and osteoporosis. Homocysteine degradation is essentially dependent on three vitamins: **folic acid, vitamin B6 and vitamin B12.**

The causes of increased homocysteine levels are manifold: Congenital defects are responsible for 15% of the population (MTHFR mutation).

Vitamin deficiency due to diet is of considerable importance.

Omega-6 and Omega-3 fatty acids

Omega 3 performs many important tasks in the body. Among other things, the fatty acids contribute to the health of the cardiovascular system (DHA) and the psyche (EPA), strengthen the immune system and play a

role in the development of the brain in children.

In the Western world, however, people tend to eat too many omega-6 fatty acids.

To achieve a balance and thus an inflammation-neutral state, experts recommend a ratio of Omega 6 to Omega 3 from 5 to 1 or lower – in the Western world, however, the ratio is on average 15 to 1 – and for you?

Cholesterol

In addition to low-fat diet and physical activity, you can influence your cholesterol levels favorably: **at least 2 salmon oil capsules** (omega-3 EPA fatty acids) increase the "good" HDL cholesterol, but have no lowering effect on the "bad" LDL cholesterol. However, LDL cholesterol can be very well lowered with isoflavones (**at least 3 red clover isoflavone capsules**) – these also provide hormonal balance in women and protect against breast cancer.

after swissheart.ch



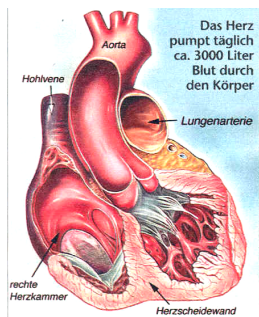
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Risk factor homocysteine: arterial calcification, depression, Alzheimer's disease and osteoporosis

Both the D.A.CH.-League Homocystein and the German Green Cross sound the alarm:

Although homocysteine has been an independent risk factor for the development of arteriosclerosis for some time, similar to cholesterol, blood lipids and



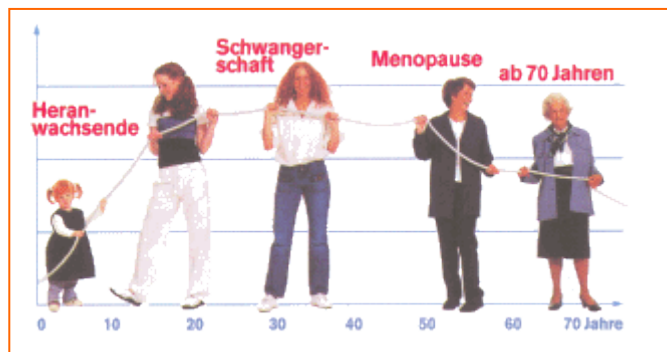
Unterschätzter Risikofaktor
Homocystein ist für
die Gefäße gefährlich

high blood pressure, this risk factor is still largely unknown in the population.

Homocysteine arises as an intermediate product in the metabolism of the amino acid methionine and damages the blood vessels.

Elevated homocysteine levels favor the development of cardiovascular diseases, strokes, thromboses and dementia.

It is still largely unknown that excessively high homocystei-



ne levels also favor the development of osteoporosis, depression and Alzheimer's disease (dementia).

The breakdown of homocysteine is essentially dependent on three vitamins: folic acid, vitamin B6 and vitamin B12.

There are many reasons for increased homocysteine levels: Congenital defects are responsible for 15% of the population (MTHFR mutation).

Vitamin deficiency due to diet is of considerable importance.

This is especially true for pregnant women, people with hereditary problems, taking hormones (including birth control pills) and women who want to have children. These people are even recommended 800µg folic acid daily (to avoid cleft lip and neural tube defect in the expected babies!).

Currently, a daily intake of at least 400 µg folic acid is recommended, also with regard to homocysteine.

However, over 50% of people only consume half with their diet!

In order to fill the supply gap and lower the homocysteine level, preparations are recommended that contain a combination of folic acid, vitamin B6 and vitamin B12. Bei Angehörigen einer Risikogruppe bezüglich Herz- und Circulatory diseases, but also generally from the age of 50, a nutritional supplement with vitamins is a highly recommended preventive care.

At the same time, high-risk patients should remember to regularly measure their homocysteine levels and adjust their vitamin intake accordingly.



Omega-3 and -6 fatty acids

What are Omega Fatty Acids?

Fatty acids such as omega 3 and omega 6 are important components of the fats in our diet.

Why are omega-3 fatty acids important?

Omega 3 takes on numerous important tasks in the body. The fatty acids contribute to the health of the cardiovascular system and the psyche, strengthen the immune system and play a role in the development of the brain in children.

Which foods contain omega-6 fatty acids?

Omega 6 is found in many plant-based foods, for example in margarine, sunflower oil, olive oil, pumpkin seed oil and avocados. In the western world, people tend to consume a lot of omega-6 fatty acids.



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Which foods contain omega-3 fatty acids?

The active forms of omega 3, which our body can use directly, are found almost exclusively in fish, such as mackerel, tuna, salmon and matjes. Some plant-based foods, such as linseed oil, rapeseed oil, and walnuts, contain alpha-linolenic acid, which the body first has to convert into active omega-3 fatty acids. Some of the fatty acids are lost in the process.

How much omega 3 do I need a day?

Professional societies recommend one or two fish meals a week to ensure the supply of omega 3. According to experts, at least 250 milligrams

per day are necessary to ensure that there is enough omega 3 to maintain the heart function; two grams or more are recommended. If you don't eat fish, you can take omega 3 through dietary supplements, which are mostly based on fish oil or algae oil.

Why is the ratio of omega 6 to omega 3 important?

Omega 3 has a vasodilator, anti-inflammatory and anticoagulant effect, Omega 6 has a vasoconstricting, inflammatory and coagulant effect. In order to achieve a balance and thus an inflammation-neutral state, experts recommend a ratio of omega 6 to omega 3 of 5 to 1 or lower - in the western world the ratio is on average 15 to 1 - and for you?

after www.cerascreen.ch



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Cholesterol

Cholesterol is a substance circulating in the blood that is especially necessary for fat metabolism. If you have too much of it, we are talking about high cholesterol, medically called hypercholesterolemia.

This disease promotes the development of arterial calcification (arteriosclerosis). The result is cardiovascular diseases such as heart attack or stroke. Frequently, not only cholesterol is increased, but also the other blood lipid levels, the triglycerides (hypertriglyceridemia).

The substance cholesterol is involved in various metabolic processes in the body, mainly in fat metabolism. The body covers its need for cholesterol through production in the liver and through intake with food. Foods that contain a lot of cholesterol are eggs and animal foods with a high fat content (butter, cheese, sausages).

If too much cholesterol circulates in the blood, it accumulates on the vessel walls and thus promotes the development of atherosclerosis. However, not every cholesterol is bad. Cholesterol occurs in the body in three forms: HDL cholesterol (high-density lipoprotein), LDL cholesterol (low-density lipoprotein) and VLDL



cholesterol (very low-density lipoprotein). The three forms differ in fat content. LDL cholesterol and VLDL cholesterol have a high fat content and promote the deposition of cholesterol on the vessel walls. HDL cholesterol, on the other hand, has a low fat content and even protects against atherosclerosis.

The causes of high cholesterol are manifold. Basically, a distinction can be made between the genetically-induced familial hypercholesterolemia and the acquired forms. In familial hypercholesterolemia, defective genes lead to a disturbance of fat metabolism. Affected people have elevated cholesterol levels in their blood from a young age. The acquired forms are much more common, but usually occur only at an older age.

Obesity, diabetes, lack of exercise and high-fat and high-cholesterol diet are risk factors for this. However, unknown factors also play a role in the development of acquired hy-

percholesterolemia. For example, a diet high in fat or cholesterol does not lead to elevated cholesterol levels in the blood in all people. It also seems that a certain predisposition is needed for this.

Increased cholesterol does not in itself cause symptoms. Complaints only occur due to the consequential damage of atherosclerosis. These include general circulatory disorders, angina pectoris, heart attack or stroke.

Hypercholesterolemia is diagnosed by measuring cholesterol levels and triglycerides in the blood. The treatment is aimed at preventing consequential damage. In addition to adjusting living and eating habits, cholesterol-lowering drugs are also a treatment option.

Statins and fibrates are well-known representatives of cholesterol lowering agents. When it comes to nutrition, foods containing cholesterol (eggs, animal fat) must be consumed cautiously. Polyunsaturated fatty acids have a particularly beneficial effect on the cholesterol metabolism. These fatty acids, also known as omega-3, are abundant in fatty sea fish, nuts and certain vegetable oils.

nach www.hirslanden.ch/

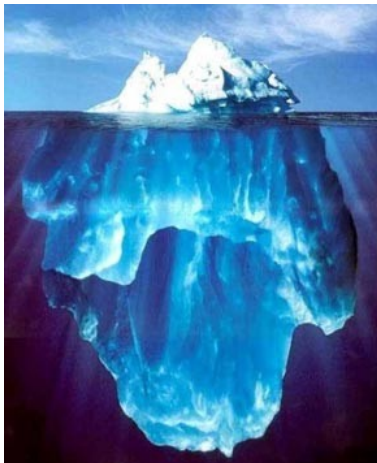


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- Do you have any of the following problems?
- Cholesterol / lipid metabolism disorders
 - High blood pressure, cardiovascular diseases, also in the family
 - Insulin resistance, high sugar levels or diabetes
-

These are the
tips of the ice-
berg:
"Metabolic syn-
drome"



What is Metabolic Syndrome?

One should speak of the metabolic syndrome or the "fatal quartet" when three of the four cardinal disorders mentioned are present. The problem: all of these diseases run without pain and acute symptoms. That is why the doctor is often consulted far too late. Treatment often only begins when there is irreparable damage, and patients

with metabolic syndrome are high-risk patients - a diabetic, for example, has the same risk of dying from a heart attack as a patient who has already had a heart attack¹

Overweight: Number 1 of the "Deadly Quartet"



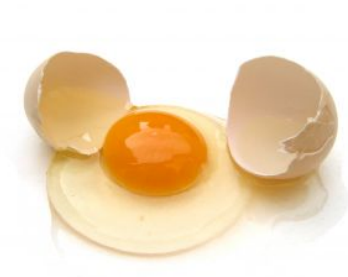
Around 60 percent of the adult population is overweight, i.e. they have a BMI (body weight in kilograms / height in meters²) of over 25 (men) or 24 (women).

High blood pressure: Number 2 of the "Deadly Quartet"



In many people, the blood flows through the vessels at increased pressure. The fatal thing: high blood pressure patients usually do not notice anything. The health of those affected is constantly at risk, because high blood pressure puts a strain on both the heart and the circulatory system.

Fat metabolism disorders (cholesterol):
Number 3 of the
"Deadly Quartet"



Cholesterol is an important part of our cells and the basic building block of vital hormones. It also plays a crucial role in the energy balance. Too high a cholesterol level can damage the blood vessels if it is deposited in the blood vessel wall. Arteriosclerosis develops. The vessels become inelastic, narrow and - in the worst case - impermeable.

Insulin resistance:
number 4 of the
"Deadly Quartet"



The main problem of type 2 diabetes is not the insulin deficiency - on the contrary, the body initially produces more insulin - but the insulin resistance. In addition to impaired insulin release, it is the engine that drives the disease further and further. Research over the last few years has revealed this.

Conclusion:

In addition to high blood pressure, the most important trigger for arteriosclerosis is hereditary predisposition, poor diet and the associated obesity and lipid metabolism disorders, but also metabolic diseases such as type 2 diabetes and its precursor, insulin resistance. Overweight often has the decisive pacemaker function.

Early and appropriate treatment of each individual disease and a change in lifestyle are very important.

We are happy to help you!

For that good feeling



"I have done everything for my prevention!"